WHAT IS CLAIMED IS:

1. A construction beam comprising a tubular housing filled with a solid material, wherein a Poisson's ratio of the tubular housing is less than the solid material to thereby confine the solid material.

2. A construction beam according to claim 1, further comprising at least one reinforcing rod in the tubular housing such that the solid material surrounds the reinforcing rod.

3. A construction beam according to claim 2, wherein the at least one reinforcing rod is stressed using a pretension method in the tubular housing.

4. A construction beam according to claim 2, wherein the at least one reinforcing rod stressed using a post-tension method in the tubular housing.

5. A construction beam according to claim 1, wherein the solid material is concrete, and wherein the construction beam further comprises at least one reinforcing rod in the tubular housing, the concrete being formed in the tubular housing after placing the reinforcing rod.

6. A construction beam according to claim 5, wherein the at least one reinforcing rod is prestressed prior to forming the concrete in the tubular housing.

7. A construction beam according to claim 1, wherein the tubular housing is formed of a fiber reinforced polymer.

8. A construction beam according to claim 7, wherein the solid material is concrete.

9. A construction beam according to claim 8, further comprising at least one reinforcing rod in the tubular housing.

10. A construction beam according to claim 9, wherein the reinforcing rod is formed of a material selected from the group comprising steel, carbon, fiberglass, and Kevlar.

11. A construction beam according to claim 7, wherein the solid material is a material selected from the group comprising concrete, fiber reinforced concrete, polymer concrete, sand, and structural foam.

12. A construction beam according to claim 7, wherein the tubular housing is formed of a material selected from the group comprising fiberglass, carbon, and Kevlar.

13. A construction beam according to claim 1, wherein the tubular housing comprises a geometrically-shaped cross-section.

14. A deck system comprising a plurality of construction beams secured side-to-side, wherein each of the construction beams comprises a tubular housing filled with a solid material, wherein a

Poisson's ratio of the tubular housing is less than the solid material to thereby confine the solid material.

15. A deck system according to claim 14, wherein each of the construction beams further comprises at least one transverse aperture therein defining a corresponding at least one transverse channel, the deck system further comprising at least one reinforcing bar extending through the transverse channel.

16. A deck system according to claim 15, wherein the at least one reinforcing bar is secured in the transverse channel under tension to provide a transverse post-stress in the deck system.

17. A method of forming a construction beam comprising filling a tubular housing with a solid material, wherein a Poisson's ratio of the tubular housing is less than the solid material to thereby confine the solid material.

18. A method according to claim 17, further comprising securing at least one reinforcing rod in the tubular housing such that the solid material surrounds the reinforcing rod.

19. A method according to claim 18, wherein the securing step comprises placing the at least one reinforcing rod under tension prior to filling the tubular housing with the solid material such that the reinforcing rod is prestressed in the tubular housing.

20. A method according to claim 17, wherein the solid material is concrete.

21. A construction beam comprising a tubular housing filled with a solid material and at least one prestressed reinforcing rod embedded in the solid material.